

Prof. Owen, and are more intimate than that eminent anatomist seems to think. In fact the nervous chain of these animals is not simply enveloped by the ventral blood-reservoir, and fixed to it in such a way as to be difficult to distinguish from it, but is enclosed in it; and this reservoir does not consist of a simple interorganic lacuna due to the disappearance of the arterial walls in this portion of the animal economy. It is not a case of juxtaposition of the nerves and arteries; it is a complete ensheathment of the former by the latter. The nerves destined for the integuments alone constitute an exception to this; they are free, and the vascular walls only accompany them to a small distance from their origin.

The principal arterial trunks open freely into one another, in such a manner that the blood can traverse a circulatory course without passing through the veins. These ways of communication are wide and easy; but there are others, formed by the terminal capillaries of the arterial system, which are continuous with the roots of the venous system. The latter is formed in part by interorganic lacunæ, in part by tubular vessels with perfectly distinct walls and presenting all the characters of true veins. This last mode of organization exists throughout in the substance of the liver. The hepatic veins open into a wide trunk situated on each side at the ventral part of the body, and giving origin to the afferent vessels of the branchiæ. The neighbouring muscles are arranged so as to act upon these venous trunks, and can cause alternately their contraction or dilatation. The blood which, by means of this mechanism, has traversed the respiratory apparatus, afterwards passes into the pericardiac reservoir.

The origin of the nerves which go to the different appendages enables us to determine the homologies of these parts, and to establish that in the *Limuli* there are no antennæ, as has been supposed by some anatomists. Lastly, I shall add that the visceral ganglionic system is not composed only of stomato-gastric and angeian ganglia in connexion with the œsophageal collar; there are also small nervous centres attached to the ganglionic chain, and furnishing branches to the terminal portion of the digestive tube.—*Comptes Rendus*, Dec. 2, 1872, pp. 1486-1488.

On the Boomdas (Dendrohyrax arboreus).

By Dr. J. E. GRAY, F.R.S. &c.

The British Museum has lately received three skins, with their skulls, of a species of *Dendrohyrax* from Elands-Post, South-east Africa.

They appear to be the Boomdas, *Dendrohyrax arboreus* of my monograph. This species was first described by Dr. Andrew Smith as *Hyrax arboreus*, and is known from the *D. dorsalis* of the west coast of Africa by the fur being much longer and softer, and the dorsal streak yellowish white; but the great difference is to be observed in the skull.

The skull of *Dendrohyrax dorsalis* is elongate and depressed, that of *Dendrohyrax arboreus* is short and high. The hinder part of the lower jaw of *D. dorsalis* is moderately dilated, and the back edge ascending from the condyle is gradually rounded off; whereas in *D. arboreus* the hinder part is much more dilated, and the ascending edge is straight nearly to the hinder end and then rounded.

The following measurements show the most striking differences between the skulls of the two species:—

	<i>D. dorsalis.</i>	<i>D. arboreus.</i>
	inches.	inches.
Length of adult skull	$4\frac{1}{8}$	$3\frac{5}{8}$
Height of skull	$2\frac{2}{8}$	$2\frac{1}{2}$
Length of lower tooth-line	$1\frac{1}{2}$	$1\frac{1}{4}$
Width of upper part of lower jaw	$1\frac{1}{4}$	$1\frac{5}{12}$

The skull of *D. arboreus* is most like that of *Hyrax Burtoni* in its height, but differs in the shape of the lower jaw and by the very small diastemata, especially that of the lower jaw.

On Deep-sea Dredging in the Gulf of St. Lawrence.

By J. F. WHITEAVES, F.G.S. &c.

To the Editors of the Annals and Magazine of Natural History.

Montreal, Dec. 20, 1872.

GENTLEMEN,—As I did not see any proofs of my article on Deep-sea dredging in the Gulf of St. Lawrence (published in the ‘Annals,’ ser. 4, vol. x. no. 59), I should be glad if you would correct the following typographical and other errors which occur in it.

Page 343, lines 14 and 15 from the bottom of the page, for “only a portion of these have” read “only a few of these have.”

Page 347, at the bottom, it appears as if two species of *Retepora* were collected; the specimens all belong to that form which Smitt calls *Retepora cellulosa*, var. *elongata*.

Page 349. Under the head *Dacrydium vitreum* the phrase occurs, “This and the preceding are new to America.” The words with quotation marks belong to the preceding species, *Yoldia frigida*; *Dacrydium vitreum* is not new to America, but *Yoldia frigida* and *lucida* are.

Page 350. The asterisk placed before *Utriculus pertenuis* belongs to *U. hyalinus*; specimens of the latter shell had been identified by me as *Bulla debilis*, Gould. My intention was to give Mr. Jeffreys as the authority for the statement that *Bulla hyalina*, Turton, and *B. debilis*, Gould, are synonymous.

Page 352, lines 10 and 11 from the bottom. Strike out the words “if any such there are.”

Additions and Alterations.

FORAMINIFERA. The long-spined *Marginulina* described on page 343 is, I believe, *Marginulina spinosus*, M. Sars.